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**TITLE:** FOLLOWER MOBILE ROBOT  
CONTROLLER  
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**INVENTOR-INFORMATION:**

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**ABSTRACT:**

PURPOSE: To attain an accurate follow-up movement of a follower mobile robot in a simple circuit constitution by obtaining a deviation through comparison between the pick-up images of a subject to be followed on the basis of the vertical position of the characteristic parts of those images and operating a control command in

accordance with the deviation.

CONSTITUTION: A follower mobile robot 2 contains a TV camera 3, and an image processor 6 analyzes the image signals received from the camera 3. Then the processor 6 obtains a distance (d) between the robot 2 and a human being 1 based on an error  $\Delta\theta$  of the angle of elevation  $\theta$  measured at the upper end position of a head 5 of the human being 1 and operates a speed control command. At the same time, the right-left control command is computed based on the vertical deviation of the center position and in response to the value of this deviation. These obtained speed control command and the direction control command are given to a drive controller 7 as the drive control command signals. As a result, a control signal for follow-up movement is obtained via a video device and the follow-up movement response is improved with small calculation value.

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